Section-A
Multiple Choice Questions (MCQ's)

Q-01. Choose the correct answer for each from the given option.

(i) If R = {(1,2), (2,3), (3,4), } then Range R = _____

(a) {2,3}   (b) {2,3,4} (c) {1,2,3,4}   (d) None of these

(ii) If log2 x = 3, then x = _____

(a) 6   (b)   (c) 10   (d) 5

(iii) $\dfrac{a^m}{a^n} = $ _____

(a) a^{m+n} (b) $a^{m \times n}$ (c) a^{m-n} (d) $a^{\frac{m}{n}}$

(iv) The degree of the polynomial $x^2 + xy^2 + y$ is: _____

(a) 2   (b) 3   (c) 4   (d) 1

(v) Order of $\begin{bmatrix} \sqrt{3} + 2 \\ 5 + 7 \end{bmatrix}$ is _____

(a) 2 x 2   (b) 1 x 2   (c) 2 x 1   (d) None of these

(vi) (x – 6)(x – 4) = _____

(a) $x^2 - 10x - 24$ (b) $x^2 + 10x - 24$

(c) $x^2 + 10x - 24$ (d) $x^2 - 10x + 24$

(vii) If A = $\begin{bmatrix} 6 & 4 \\ 3 & 2 \end{bmatrix}$, then |A| = _____

(a) 0   (b) 2   (c) 4   (d) 6

(viii) $ax^2 + bx + c = 0$, will remain quadratic equation, if _____

(a) $a \neq 0$, b = 0 and c = 0   (b) A = 0, $b \neq 0$ and $c \neq 0$

(c) $A \neq 0$ and c = 0   (d) Both (a) and (c)

(ix) The L.C.M of $x^3 - y^3$ and $x6 - y6$ is _____

(a) $x^3 - y^3$ (b) $x^3 + y^3$ (c) x6 + y6   (d) x6 - y6

(x) If the sum of two angles 90° then they are called _____

(a) Vertical Angles   (b) Adjacent Angles

(c) Complementary Angles   (d) Supplementary Angles

(xi) If the vertex and one arm of two angles are common, they are called _____

(a) Vertical Angles   (b) Adjacent Angles

(c) Complementary Angles   (d) Supplementary Angles

(xii) A quadrilateral having only one pair of opposite sides parallel is called _____

(a) Rhombus   (b) Trapezoid

(c) Rectangle   (d) Parallelogram

(xiii) In a right angle triangle the side opposite to right angle is called _____

(a) Perpendicular   (b) Hypotenuse

(c) Altitude   (d) Base

(xiv) The point through which bisectors of angles of a triangle pass is called _____

(a) Incenter (b) Orthocenter (c) Centroid (d) None of these

(xv) $1 + \tan^2 45° = \sec^2$ _____

(a) 30°   (b) 45°   (c) 60°   (d) 90°

(xvi) Sin30° = cos _____

(a) 30°   (b) 45°   (c) 60°   (d) None of these

(xvii) A line which intersect a circl at one and only one point is called _____ of the circle.

(a) Radial segment (b) Secant   (c) Semi – circle

(d) Tangent

(xviii) If a, b and c are in continued proportion, ten _____

(a) $ab = c^2$ (b) $a^2 = bc$ (c) $ac = b^2$

(d) None of these

(xix) The mean proportion to 75 and 12 are

(a) ± 20   (b) ± 10   (c) ± 30   (d) ± 40

(x) A series contains values 15,19,13,11,14,16, its median is :

(a) 12   (b) 13   (c) 14   (d) 4.5